

**FIG. 1**

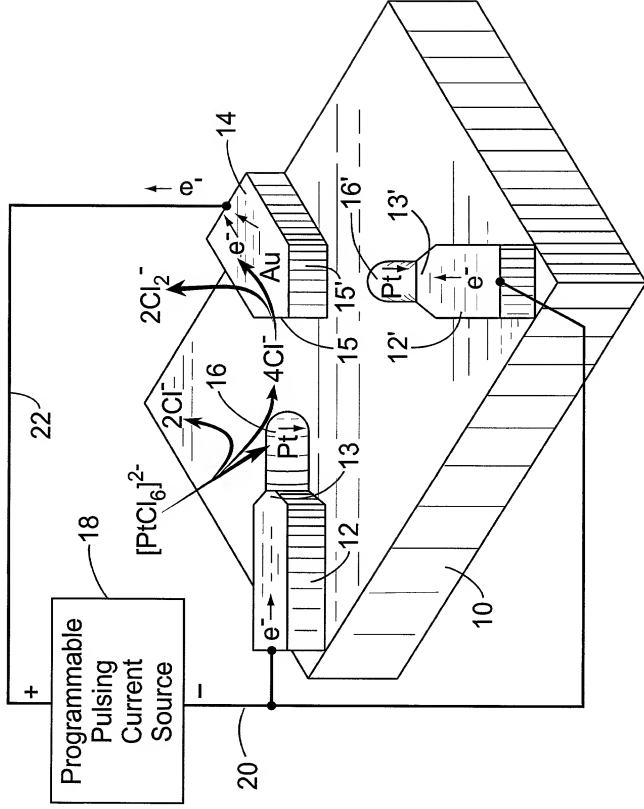
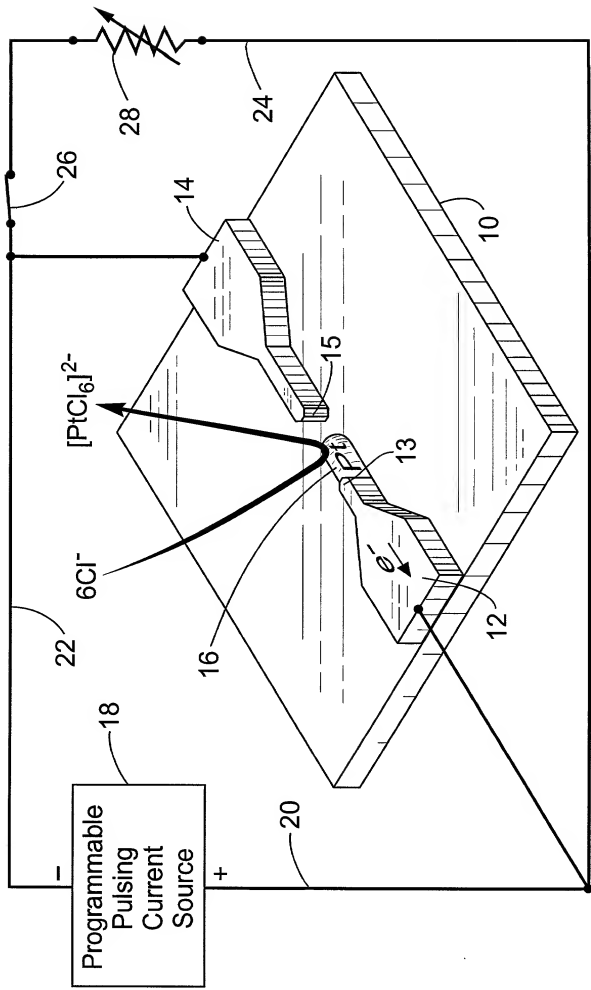
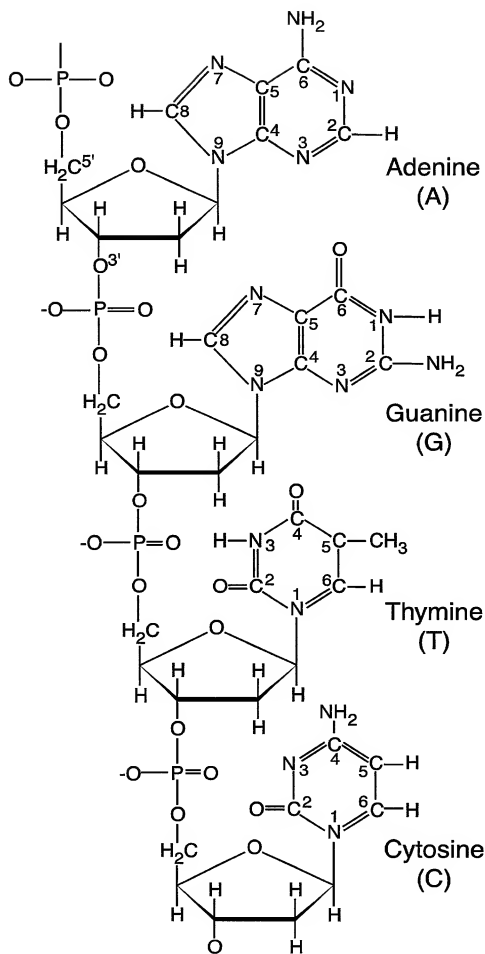


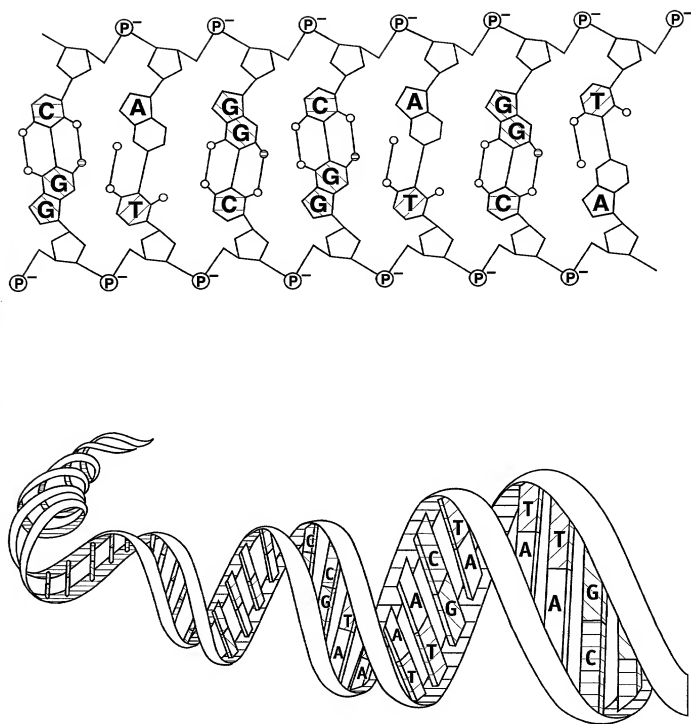
FIG. 2



**FIG. 3**



**FIG. 4**



**FIG. 5**

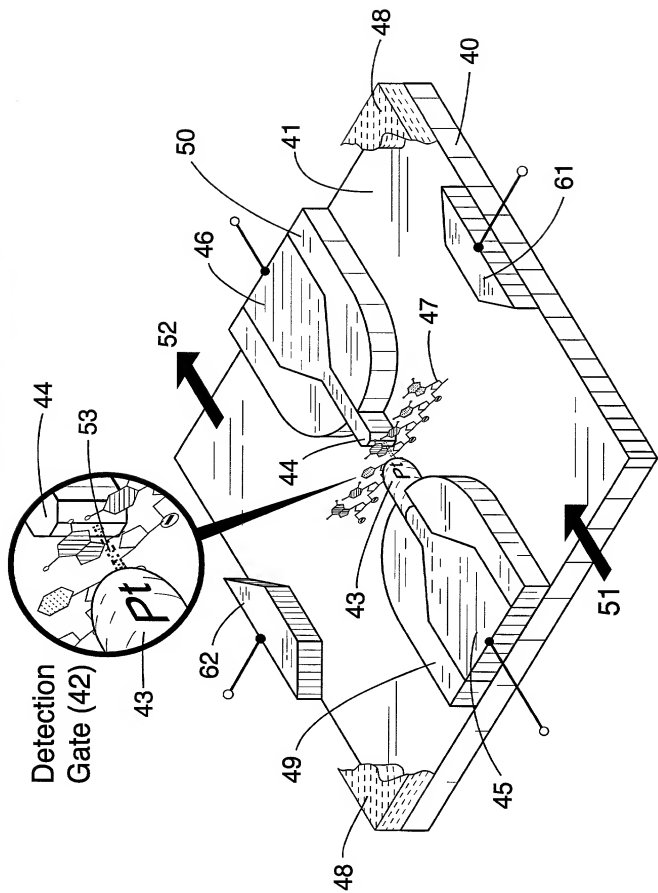


FIG. 6

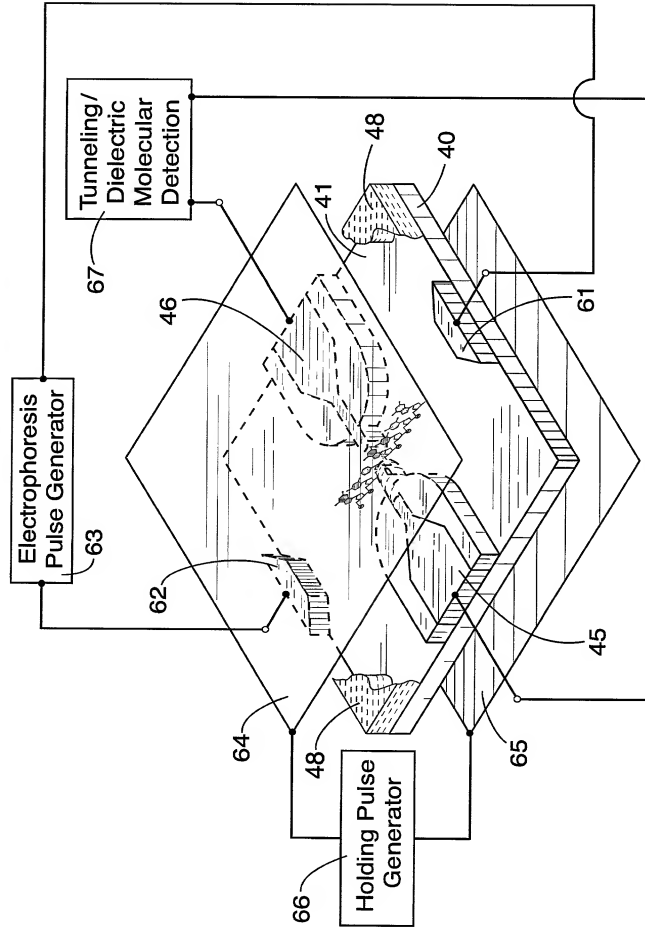


FIG. 7

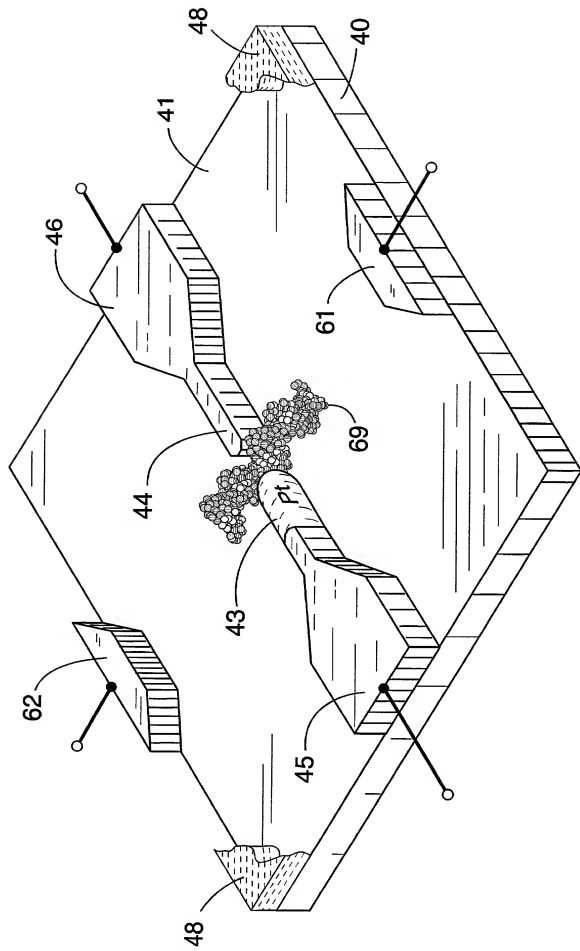
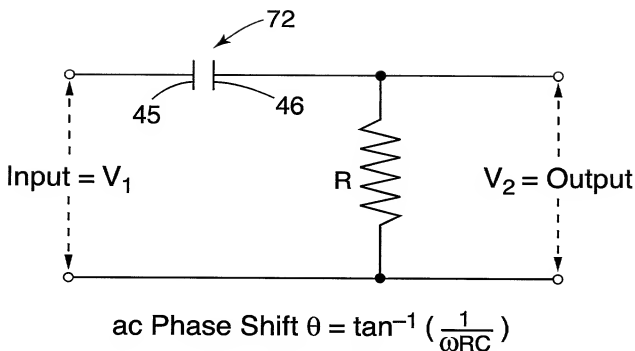
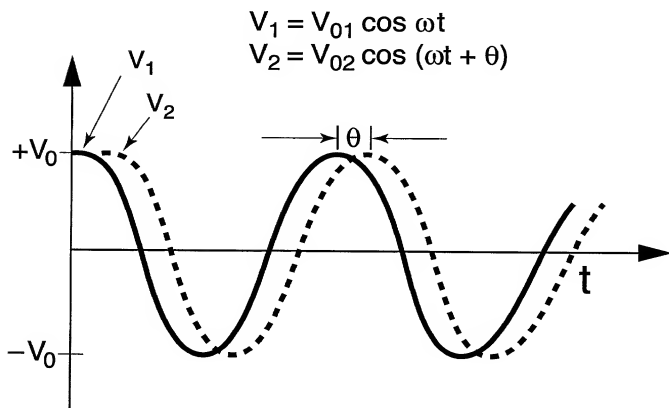


FIG. 8





**FIG. 9a**



**FIG. 9b**

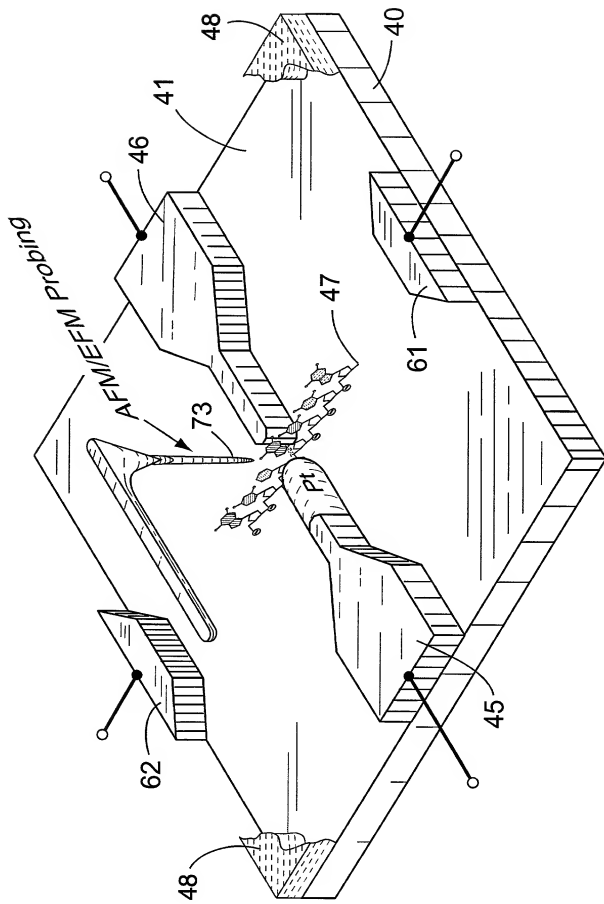
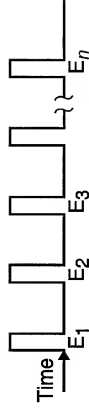
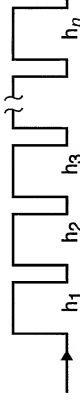


FIG. 10

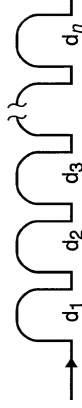
Electrophoresis Pulse



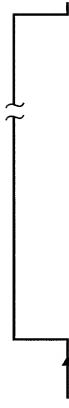
Perpendicular Holding Pulse



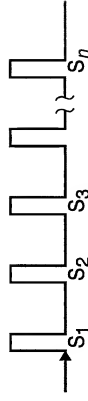
Tunneling/Dielectric Molecular Detection



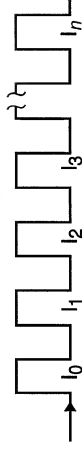
Continuous Tunneling/Dielectric Detection



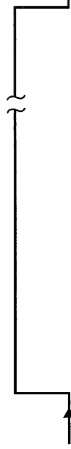
AFM/EFM Probing



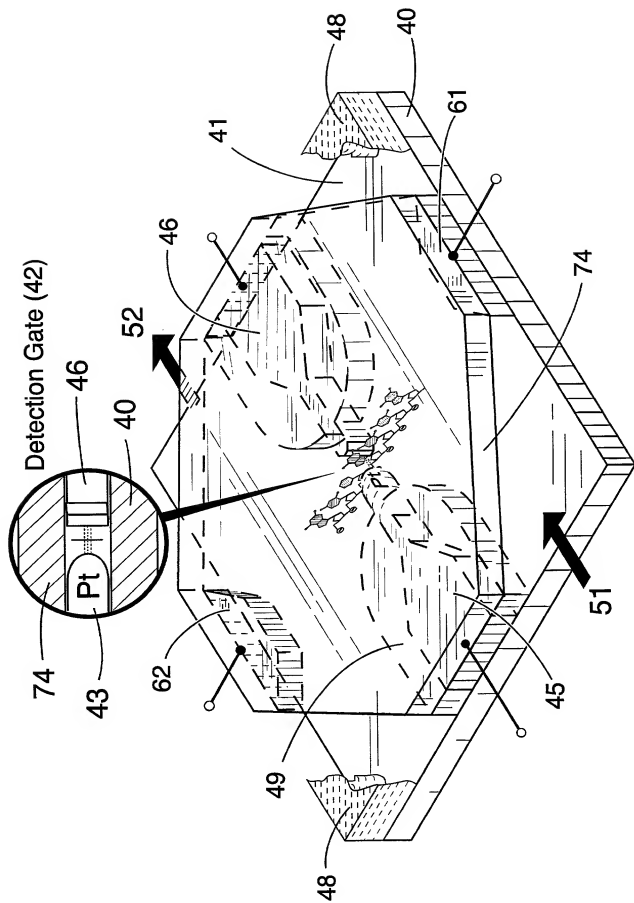
AFM/EFM Imaging



Continuous AFM/EFM Probing



**FIG. 11**



**FIG. 12**

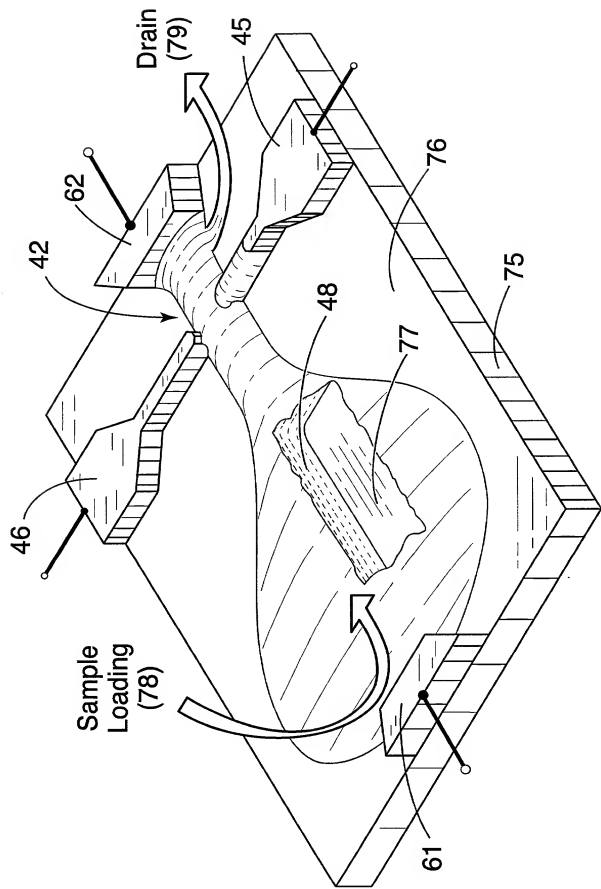


FIG. 13